



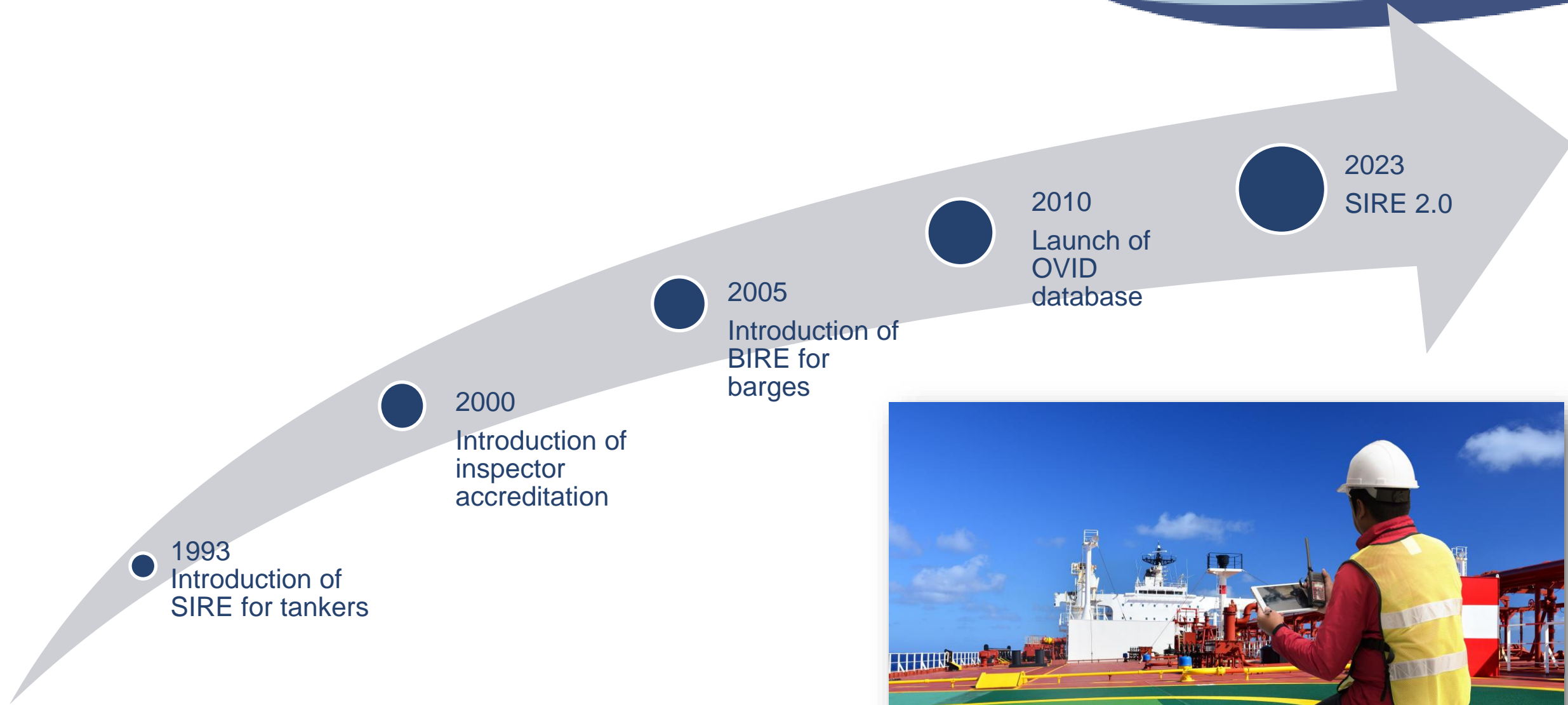
# What tanker operators should know about SIRE 2.0

9th Tanker Operator Forum, Hamburg - Wed Nov 1, 2023

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# The SIRE journey so far





## What is new in SIRE 2.0?

- Pre-inspection inputs: PIQ, certificates, photographs
- New set of questions – the SIRE Question Library (SQL)
- New approach to compiling the inspection questionnaire
- Introduction of human factors
- New technology – the tablet, the Inspection Editor software.
- Enhanced reports including more data and photographs
- Tighter controls and oversight of the behaviours of all participants
- Integrated feedback portal to facilitate continuous improvement (SFI) available to ALL users.
- A phased introduction of the new programme

# Pre-Inspection Activities



## Operator Inputs

- Booking tool, HVPQ and PIQ – accuracy required to ensure CVIQ is correctly compiled.
- Photographs – should accurately reflect current condition. A photograph template must be created to allow a vessel to be registered for SIRE 2.0 inspections.
- Certificates update, ensure HVPQ is updated first, before updating certificate details
- Pre-Inspection Declaration and CVIQ compilation and distribution. The CVIQ is only compiled and made available to the inspector when the Declaration is completed

# Pre-Inspection Activities



## Inspection Requests

- Requesting an Inspection, process is similar to VIQ7 but
  - Cargo type entry should be accurate as this triggers the selection of certain questions in the CVIQ – please do not leave blank
  - If STS operations are expected to be taking place during the inspection, these should be selected in the box provided – if not selected STS questions will not be included in the CVIQ
- Cancelling a Request is straightforward
- Cancelling an Inspection requires a reason for cancellation to be selected from a drop-down list.

# The SIRE Question Library



- 325 new questions, plus photograph questions
- Contained in a database known as the SIRE Question Library (SQL)
- Based on barriers identified by a fresh bow-tie analysis
- Each question has a stated objective
- Industry and inspection guidance instantly available to the inspector
- Potential negative observations identified and listed
- Photograph questions to give objective evidence of vessel condition
- Conditional, inclusion in the CVIQ is conditional upon data inputs to Inspection request, HVPQ and PIQ.
- Core and Rotational 1 and 2.

# A new SQL, but also a new way of asking and responding to these questions



- Response tools – hardware, process and human
- Subject of Concern(NOC) and Nature of Concern (NOC)
- Drop-down choices allow for data mining
- Binary or graduated responses
- Exceeds expectations (human only), as expected, largely as expected, not as expected
- Ad hoc photographs to support observations

# The Compiled Vessel Inspection Questionnaire (CVIQ)



- The Compiled Vessel Inspection Questionnaire – the CVIQ
- A bespoke question set for each inspection, tailored to the particular vessel and her equipment, of around 65 questions.
- How the compiler works
- Core and rotational questions
- Previous core question negative observations, visible to the inspector only.
- Conditional questions, triggered by HVPQ, PIQ and booking data
- Campaign questions
- Photograph questions
- Not every question every time, no more variants, Not Applicable questions minimised





## Human Factors – the third leg of the stool

- At first SIRE was all about Hardware, then Procedures were addressed. Now SIRE 2.0 has introduced Human Factors into the inspection programme
- The inclusion of Human Factors is a major enhancement to the SIRE programme.

# Human Factor Training Material on the OCIMF Website

## Videos for the Masters, officers and crew

This set of videos has been produced for viewing by ship's staff to help them understand the importance of human factors within the SIRE 2.0 inspection and how this relates to their role onboard the ship. Ideally, the videos should be viewed sequentially.

The first video is designed to be viewed by all crew with the rest being more relevant for the Master and officers.

Although these videos are aimed specifically at the Master, officers and crew, to get a holistic picture, these stakeholders should also view the videos for the vetters and operators.

These videos can be downloaded and should be circulated to ships for regular viewing by the ship-staff as part of a regular discussion and training programme onboard.

Officer All Crew Briefing



Officer Module 1 Additional briefing for vessel officers



Officer Module 2 More on the inspection



Officer Module 3 What the inspector reports



Officer Module 4 Responding to human observations



# Human Factor Training Material on the OCIMF Website



## Videos for vetters, and operators

This set of five videos has been produced for vetters in OCIMF member organisations as well as staff based in operator's offices ashore. These videos are designed to help vetters and operators understand the importance of human factors within the SIRE 2.0 inspection.

While these videos are aimed specifically at vetters and operators, to get a holistic picture, these stakeholders should also view the videos for the Master, officers and crew.

Owner Operator Module 1 Human factors in SIRE 2 0 inspections



Owner Operator Module 2 Risk and human factors



Owner Operator Module 3 What to expect from the inspection



Owner Operator Module 4 Responding to human observations



Owner Operator Module 5 Getting ahead of human factor issues



Vetting Organisation Module 6 Human factor information to support vetting assessments



# New technology to facilitate enhanced inspections and data security – the Inspection Editor



- Software developed exclusively for OCIMF and SIRE 2.0
- Records the inspection from start to finish
- Presents the questions, including guidance, and records the responses via the Response Tools
- Integrates all the data provided by the operator (certificates, PIQ, HVPQ and standard photographs) and presents it to the inspector.
- The inspector reviews this information BEFORE boarding allowing more time on board for the physical inspection.
- Generates the draft inspection report including any ad hoc photographs the inspector chooses to tag

# Why use a tablet device for SIRE 2.0?



# SIRE 2.0 Tablet Factsheet



STRENGTHENING SIRE

## Tablet-based inspections



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SIRE 2.0

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Model 8023421

Telephone +44 (0)20 7654 1200

Email [enquiries@ocimf.org](mailto:enquiries@ocimf.org)

Available on the OCIMF SIRE 2.0 Webpage

# What happens if the tablet fails or is not allowed on board?



- In such cases, a paper based contingency process is available
- This can be full or partial, for when the areas where the tablet can be used is restricted
- This process requires the active agreement of the submitting company
- Inspections completed this way will be suitably identified in the SIRE database
- Contingency inspections are NOT an either/or choice!

# Enhanced reports

Available from the Inspection Report and Inspector's responses:



Number of negative observations



Number of positive human (exceeds) observations



Physical condition of Vessel



Supporting photographs for negative observations.



Evidence of correct use of defect reporting system.



Evidence of correct use of incident reporting system.

Available from the PIQ data/HVPQ:

- ✓ Classification society surveyors visits (reason and date of last) - PIQ.
- ✓ Detailed CAP\* information - PIQ/HVPQ.
- ✓ Reporting of onboard equipment changes for class/flag items\* – PIQ.
- ✓ Understanding of additional training provided to officers\* (CRM) - PIQ.
- ✓ UKC policy and specific vessel values.
- ✓ Common working language and SMS language(s)\* - PIQ/HVPQ.
- ✓ Ship hardening information\* - PIQ.
- ✓ Lube oil analysis data\* - PIQ.
- ✓ Accurate incident history for selected events - PIQ.
- ✓ Level of management oversight of Vessel - PIQ:
  - Superintendent inspections.
  - Navigation audit and assessments.
  - Cargo audits\*.
  - Mooring and anchoring audits\*.
  - Engineering audits\*
- ✓ Standard and enhanced manning data – PIQ.

\* Selectively verified by the inspector while onboard



# Post-inspection



- The new report format allows for structured operator comments to each negative observation, immediate cause, root cause, corrective action, preventative action
- Inspections can be opened for amendment and resubmission by the inspector prior to publication
- Publishing an inspection is as for VIQ7, with 14 days allowed for comments to be entered.
- Once published, an inspection cannot be amended, it can only be withdrawn – change from VIQ7.

# Enhanced reports



- The new report format allows for structured operator comments to each negative observation, immediate cause, root cause, corrective action, preventative action
- The additional data in the report is designed to be easy to data mine using drop-downs instead of free form comments
- The inclusion of the standard photographs gives a virtual tour of the vessel from your desk, a powerful tool
- Questions validate TMSA based information entered in the PIQ
- Where PIQ data is not validated by the inspector, it is presented as such

## Enhanced reports – photographs to support observations and verify condition

### 9.1. Mooring Equipment Management

- 9.1.1. Were the Master and deck officers familiar with the company procedures for the testing and correct operation of the mooring winch brakes, and were records available to demonstrate that brakes had been tested periodically, after maintenance or when there was evidence of premature brake slippage?

Operator uploaded photos



- 11.1.26. Was photograph no.26, the oil filtering equipment, representative of the condition as seen onboard at the time of the inspection and, if so, was it free of any areas for concern?

Operator uploaded photos



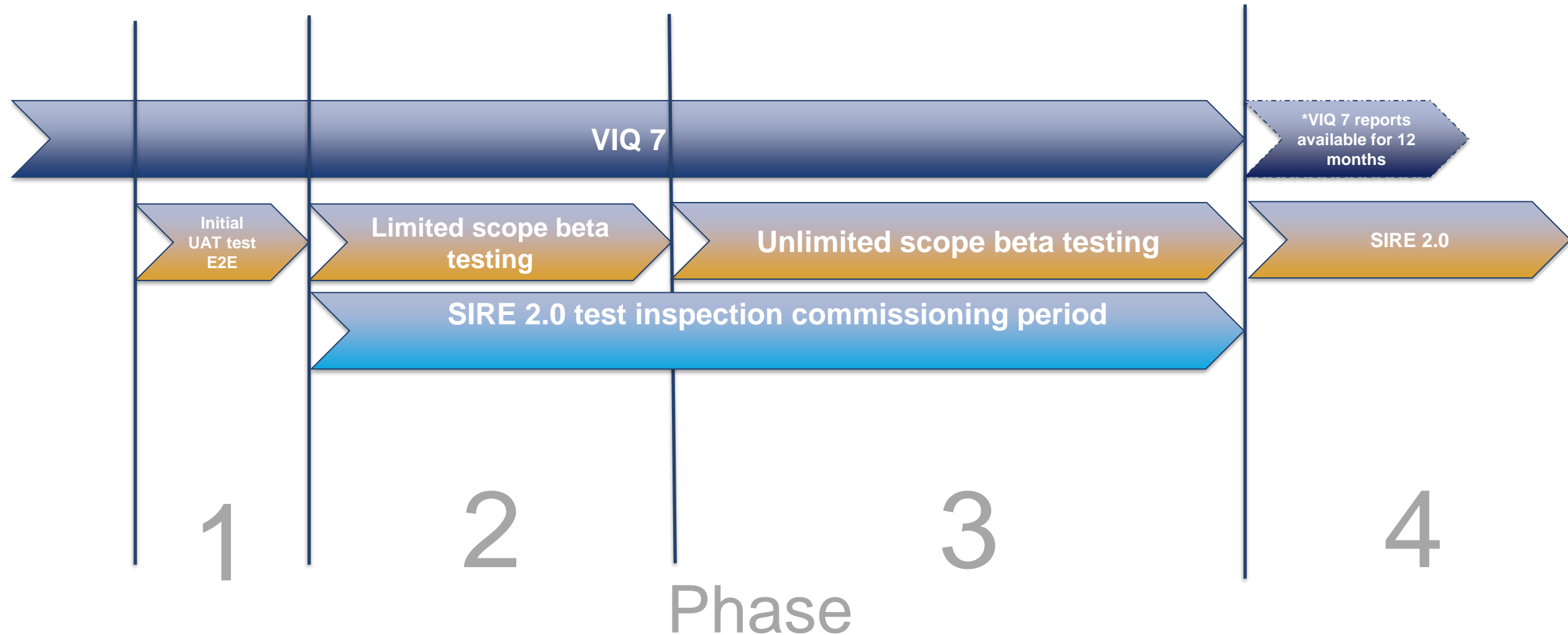
Photograph Photo provided representative.

# Tighter controls on behaviours



- MDM software - kiosk mode
  - Camera
  - Data transfer
- Data and action tracking , geo data, times
- CVIQs can only be amended and resubmitted by the original inspector
- Inspectors can only be assigned by the submitting company
- Enhanced functionality to ensure suitable inspectors are assigned to each inspection
  - Assigning and reassigning inspectors
  - Criteria for validating inspectors

## Transition from VIQ7 to SIRE 2.0 Timeline



## SIRE 2.0 update



- Phase 2 of the roll-out of SIRE 2.0 is progressing well and is nearing completion. In preparation for the start of Phase 3, the remaining tablet devices are being procured, programmed and distributed to inspectors as and when ready via the appointed equipment provider, Vokhus.
- With the phased roll-out on track, programme participants are reminded to complete their preparations for Phase 3, when all programme participants have the opportunity to conduct SIRE 2.0 inspections for familiarisation and testing purposes (however, VIQ7 will still be used as the commercial inspection programme throughout Phase 3).
- It is anticipated that Phase 3 will commence towards the end of Q4 2023, once the Critical Success Factors for progressing forward have been met. All programme participants will be alerted via the SIRE portal and via AFM when the opportunity to conduct SIRE 2.0 Phase 3 inspections becomes available.

# SIRE 2.0 update



- OCIMF has been rolling out the new digitalised programme in a phased approach in recognition that SIRE 2.0 inspections are significantly different from the existing SIRE vessel inspection regime. Although no major issues were reported during the inspections conducted during Phase 1 and 2 of the roll-out, programme participants should pay particular attention to the below learnings:
- Vessel operators must ensure crew are fully familiarised and trained with SIRE 2.0 processes, procedures and documentation.
- Vessel operators are reminded of the importance of the pre-inspection submissions stage. Inspectors use the pre-inspection information available on their tablets prior to the inspection to plan the inspection and use this information during the opening meeting with the vessel staff, so this task must be completed in full.
- Unlike the existing programme, SIRE 2.0 inspections require the vessel operator to complete the Pre-Inspection Declaration not less than 48 hours, but ideally at least 96 hours, before an inspection is planned to commence. Any SIRE 2.0 inspection request requiring vessel operator input will be displayed on the specific user's SIRE landing page.
- All participants are reminded that under SIRE 2.0, an inspection report will no longer be accessible for resubmission once a report has been published. Once a report has been published, it can only be withdrawn from the system by the submitting company.

# SIRE 2.0 update



## How to participate in a Phase 3 inspection

- When Phase 3 begins, all programme participants will gain access to a SIRE 2.0 inspection tab on their registered SIRE user account – this means there is no need to complete any registration processes. Vessel operators can request an inspection for vessels in their fleet directly from SIRE account using the SIRE Inspection Request functionality
- The inspection request will then be visible to the submitting company nominated for the inspection via the Inspection Requests screen. The submitting company may then proceed with the inspection management process as guided in the document provided in the links below.
- Full instructions for booking a SIRE 2.0 inspection during Phase 3 of the roll-out are available in the SIRE 2.0 Inspection Management Process documentation available here:
  - ❖ Vessel Operators: <https://www.ocimf.org/document-library/812-sire-2-0-inspection-management-processes-vessel-operator-version-1-0/file>
  - ❖ Submitting Companies: <https://www.ocimf.org/document-library/813-sire-2-0-inspection-mangement-processes-submitting-company-version-1-0/file>
  - ❖ Inspectors: <https://www.ocimf.org/document-library/811-sire-2-0-inspection-management-processes-inspector-version-1-0/file>



# SIRE 2.0 update



## Importance of participating in a Phase 3 inspection

- During Phase 3 of the roll-out, SIRE 2.0 is available for testing/trial purposes only and not as a commercial tool. It will be a full end-to-end inspection, under normal inspection conditions. The resulting SIRE 2.0 Inspection Report will be fully anonymised on completion, so there is no commercial risk to companies participating in this testing phase.
- In Phase 3, the cost of conducting a SIRE 2.0 inspection (for testing purposes) will need to be agreed between the Vessel Operator and the Recipient Company.
- More phase-specific information will be provided to all programme participants in the coming weeks. It is important to stress that the existing SIRE programme will continue to be supported, ensuring SIRE incorporates the latest industry standards, best practice, and regulation.
- Should you have any queries relating to the project or preparation for participating in a Phase 3 SIRE 2.0 inspection, please contact [sire2.0@ocimf.org](mailto:sire2.0@ocimf.org)



Thank you for your attention

Questions most welcome!





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**A global marine industry that causes no harm to people  
or the environment**

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